

The Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A method comprising:  
downloading a call service component to a call controller in response to a network carrier turning on a new service that corresponds to the call service component, wherein the call service component is for a particular user area comprising a plurality of users, wherein a call service component is downloaded when a new service is turned on, but not on a per-call basis;  
using the call service component to support telecommunication traffic to or from a gateway under control of the call controller; and  
removing the call service component from the call controller when the network carrier shuts off the new service corresponding to the call service component for the particular user area in the network.
2. (Previously Presented) The method of claim 1 including dynamically downloading the call service component.
3. (Canceled).
4. (Original) The method of claim 1 wherein the call service component uses a half-call model that views a call either as an originating or a terminating segment of the call.
5. (Original) The method of claim 4 including downloading the call service component from a central repository.

6. (Original) The method of claim 4 wherein each segment of the call handles service and access protocols according to a previously downloaded call service component with which the segment is associated.
7. (Original) The method of claim 4 wherein each call service component comprises a wrapper surrounding a set of core functions, wherein the wrapper supports dynamic downloading of the component to the call controller.
8. (Original) The method of claim 1 wherein downloading the call service occurs while the call controller is operational and supporting live traffic, the call service being downloaded without disrupting the live traffic.
9. (Original) The method of claim 1 wherein the call service component comprises an application component for implementing call behavior.
10. (Original) The method of claim 1 wherein the call service component comprises a resource component for providing access to telephony resources by an application component that implements call behavior.
11. (Original) The method of claim 4 including establishing a call having an originating segment that uses the call service component downloaded to the call controller.
12. (Original) The method of claim 11 wherein the call service component downloaded to the call controller represents a first call type, and wherein the call has a terminating segment that represents a different call type.
13. (Original) The method of claim 4 including establishing a call having a terminating segment that uses the call service component downloaded to the call controller.

14. (Original) The method of claim 13 wherein the call service component downloaded to the call controller represents a first call type, and wherein the call has an originating segment that represents a different call type.

15. (Currently Amended) A telecommunication system comprising:

a data store comprising a repository of call service components;

a first data processor comprising a call controller; and

a second data processor comprising a gateway under control of the call controller;

wherein the call controller is configured for:

downloading a call service component from the repository in response to a network carrier turning on a new service that corresponds to the call service component, wherein the call service component is for a particular user area in the network, wherein the particular user area comprises a plurality of users, wherein a call service component is downloaded when a new service is turned on, but not on a per-call basis;

using the call service component to support telecommunication traffic to or from the gateway; and

removing the call service component from the call controller when the network carrier shuts off the new service corresponding to the call service component for the particular user area in the network.

16. (Previously Presented) The system of claim 15 including a telecommunications network, wherein the call controller is configured for dynamically downloading the call service component.

17. (Canceled)

18. (Original) The system of claim 15 wherein each call service component uses a half-call model that views a call either as an originating or a terminating segment of the call.

19. (Original) The system of claim 18 each segment of the call handles service and access protocols according to a previously downloaded call service component with which the segment is associated.

20. (Original) The system of claim 18 wherein each call service component comprises a wrapper surrounding a set of core functions, wherein the wrapper supports dynamic downloading of the component to the call controller.

21. (Original) The system of claim 18 wherein the call controller is configured for downloading the call service while the call controller is operational and supporting live traffic, the call service being downloadable without disrupting the live traffic.

22. (Original) The system of claim 15 wherein the call service components stored in the repository that can be downloaded to the call controller comprise application components for implementing call behavior and resource components for providing access to telephony resources by the application components.

23. (Currently Amended) An article comprising a computer-readable medium storing computer-readable instructions for causing a computer system to:

download a particular call service component from a repository of call service components in response to a network carrier turning on a new service that corresponds to the particular call service component, wherein the call service component is for a particular user area comprising a plurality of users, wherein a call service component is downloaded when a new service is turned on, but not on a per-call basis;

use the particular call service component to support telecommunication traffic to or from a gateway under control of a call controller; and

remove the call service component from the call controller when the network carrier shuts off the new service corresponding to the call service component for the particular user area in the network.

24. (Previously Presented) The article of claim 23 including instructions for causing the computer system to dynamically download the call service component.

25. (Canceled)

26. (Original) The article of claim 23 wherein each call service component uses a half-call model that views a call either as an originating or a terminating segment of the call.

27. (Original) The article of claim 23 wherein each segment of the call handles service and access protocols according to a previously downloaded call service component with which the segment is associated.

28. (Original) The article of claim 23 wherein each call service component comprises a wrapper surrounding a set of core functions, wherein the wrapper supports dynamic downloading of the component from the repository.

29. (Original) The article of claim 23 including instructions for causing the computer system to download the particular call service while the call controller is operational and supporting live traffic, the call service being downloaded without disrupting the live traffic.

30. (Original) The article of claim 23 wherein the particular call service component comprises an application component for implementing call behavior.

31. (Original) The article of claim 30 wherein the particular call service component comprises a resource component for providing access to telephony resources by an application component that implements call behavior.

32. (Original) The article of claim 23 including instructions for causing the computer system to establish a call having an originating segment that uses the particular call service component downloaded from the repository.

33. (Original) The article of claim 23 including instructions for causing the computer system to establish a call having a terminating segment that uses the particular call service component downloaded from the repository.

34. (Currently Amended) A method comprising:

dynamically downloading a call service component to a call controller when a network carrier turns on a new service corresponding to the call service component, wherein the call service component is for a particular user area that comprises a plurality of users, wherein a call service component is only downloaded when a new service is turned on, but not on a per-call basis;

using the call service component to support telecommunication traffic to or from a gateway under control of the call controller; and

removing the call service component from the call controller when the network carrier shuts off the new service corresponding to the call service component for the particular user area in the network;

wherein the call service component comprises a wrapper surrounding a set of core functions, wherein the wrapper supports the dynamic downloading of the call service component to the call controller.

35. (Previously Presented) A system comprising:

- a network carrier;

- a first data processor comprising a plurality of media gateways associated with the network carrier;

- a second data processor comprising a call controller adapted to control a first one of the media gateways;

- a third data processor comprising a management system associated with the call controller, wherein the management system is adapted to:

  - direct dynamic downloading of a service component to the call controller through a Java Dynamic Management Kit framework when the network carrier turns on a new service for the plurality of media gateways, wherein a call service component is downloaded when a new service is turned on, but not on a per-call basis;

    - wherein the service component comprises a set of core functions surrounded by a wrapper, the set of core functions provides functionality associated with the service component, and the wrapper supports the dynamic downloading; and

  - control configuration of the first media gateway and the call controller;

- wherein the call controller is adapted to use service component to support telecommunication traffic to or from the first media gateway, and

- wherein the management system is adapted to remove the service component when the network carrier shuts off the new service corresponding to the call service component for the plurality of media gateways.